

Montana Traffic Safety Association

Enriching the Learning Environment

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Differentiating Instruction

"What I hear, I forget. What I see, I remember. What I do, I understand."

(Confucius 451 BC)

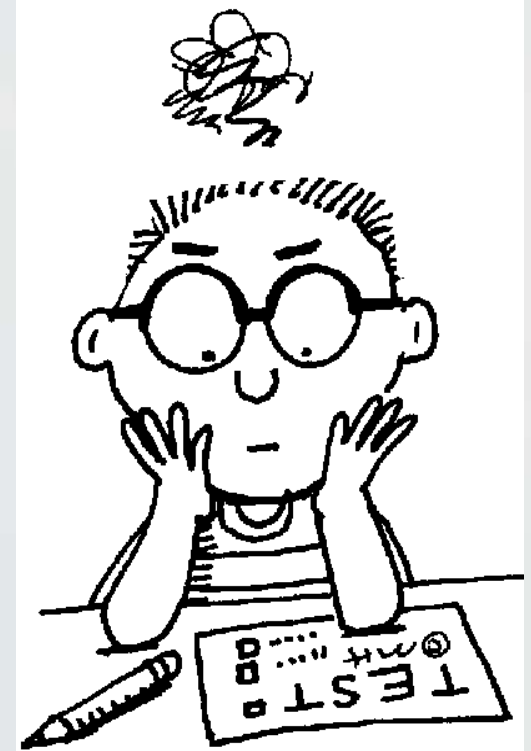
Why do we have Signs, Signals and Pavement Markings?



Ready for a Sign Quiz?

Please number a
sheet of paper from
1-50.

Avoid distractions as
this quiz moves at
the speed of the
driving environment!



Intersection Ball Sign Recognition Activity



Practice Smooth Steering and Targeting Skills

- Have students create steering wheels approximately 14" in diameter
- Use sheets of pink/blue insulation, large paper plates, and number...



Classroom Steering Wheel

Steering wheel cover, broom handle, flag pole bracket (gives you the tilt feature 😊), clamp for the teacher's desk



Add Practicing Smooth Braking/Accelerating Techniques to Practicing Steering Techniques in the Classroom

- Place a slightly blown up balloon in a lunch bag or “puff” some air in a zip lock bag.
- Gives feeling of applying and releasing pressure on pedals.

Line of Sight

Drivers steer in the direction they look!

Used orange surveyor's tape to
practice line-of-sight skills

- Hold near nose while another student moves the other end to demonstrate where the driver should be looking

Teaching Reference Points

- Using a plastic car, affix a piece of surveyor's tape in the driver's seat to demonstrate reference points and vehicle operating space.



Reference Points

Relates
some part of
the vehicle
to some part
of the
roadway

**LEFT
Reference
Points**



**6 inches from
line or median**



**3 feet from line
or median**

**RIGHT
Reference
Points**



**6 inches from
line or curb**



**3 feet from line
or curb**

What Actually Controls Your Vehicle?

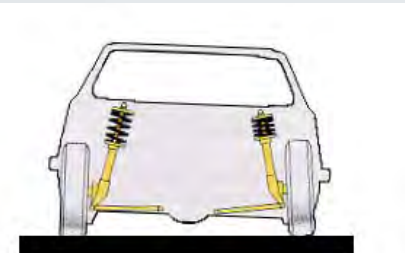
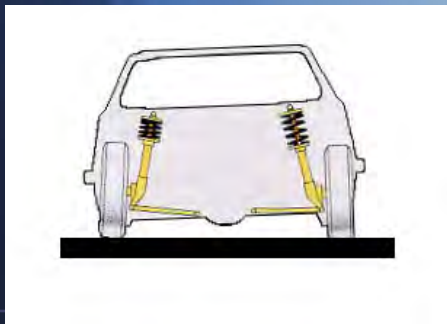
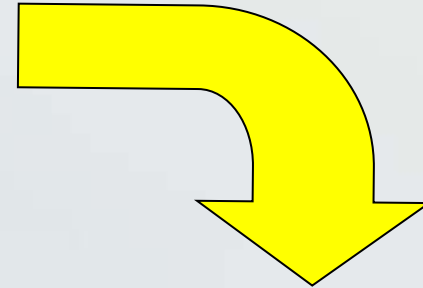
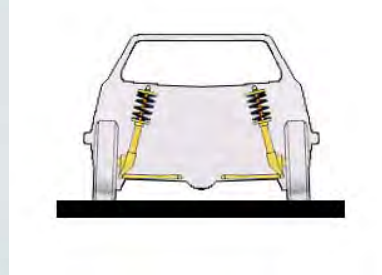
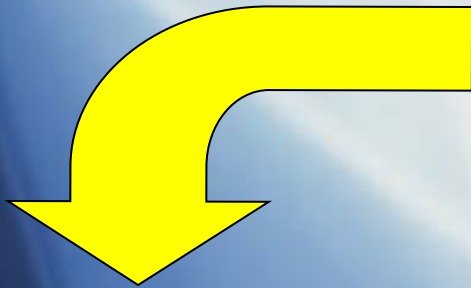


Control of your vehicle is completely dependant upon these four tire patches in contact with the pavement. Each tire patch is approximately the size of a dollar bill.



Controlling Vehicle Balance

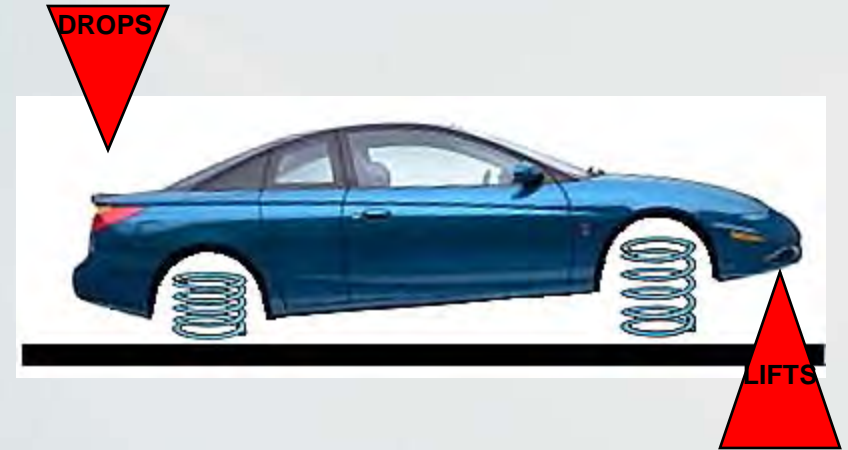
Roll: vehicle's weight shifts from side to side reducing the size of tire patch on one side.



Pitch: vehicle's weight shifts to front or rear tires

Rear Pitch:

Changing vehicle load from front to rear when releasing brake or accelerating.



Front Pitch:

Changing vehicle load from rear to front occurs when braking or releasing accelerator.

Yaw: Vehicle loses traction to the rear

When a vehicle loses traction to the rear, the vehicle tends to move to the left or right around its center of gravity.



Pitch, Roll, and Yaw Plastic Car/Dowel Rod

- Drill 3 holes in plastic car the size of dowel rod:
 - Front bumper to rear bumper (roll)
 - Side to side (pitch)
 - Top to bottom (yaw)

Need Air? Place Your Window All the Way Down!

- Use a piece of plexiglass
- Ask someone to punch the plexiglass while holding it in front of them
- Now ask the student to hit the edge of the piece of piece of plexiglass—
This simulates your head hitting the edge of a window positioned half way down...OUCH!

Underinflated Tires...Oh Dear!

- Give each student a paper clip
 - Ask them to unfold it
 - Ask them to bend it back and forth – it will heat up and eventually break
 - Show piece of steel-belted tire

PowerPoint Classroom Game Templates With Music!

<http://www.murray.k12.ga.us/teacher/kara%20leonard/Mini%20T's/Games/Games.htm>

